Name: _____

Chap 7 and 8 REVIEW   **Study all of your Chapter 7 and 8 Notes, HW, and Review**

1. Rotate $\triangle ABC$ whose coordinates are A(3, 2), B(3, 6), C(6, 1) 90° counterclockwise about the origin and then Reflect it over the Y axis.
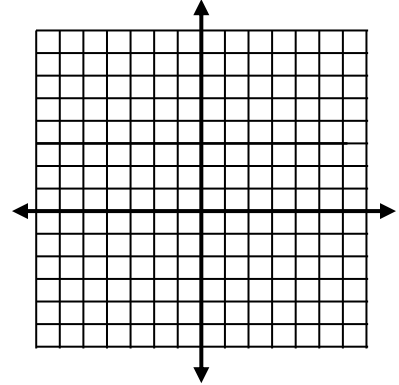
A'(,   )

B'(,   )

C'(,   )

A''(,   )

B''(,   )

C''(,   )
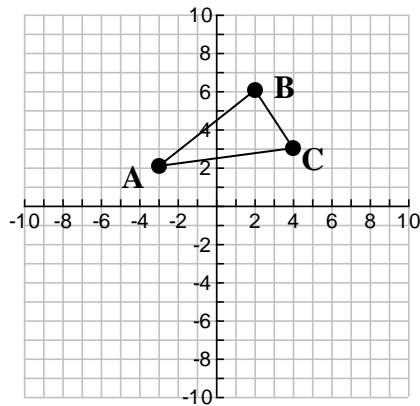
2. Find the image of $\triangle ABC$ after a translation of <4, -5>
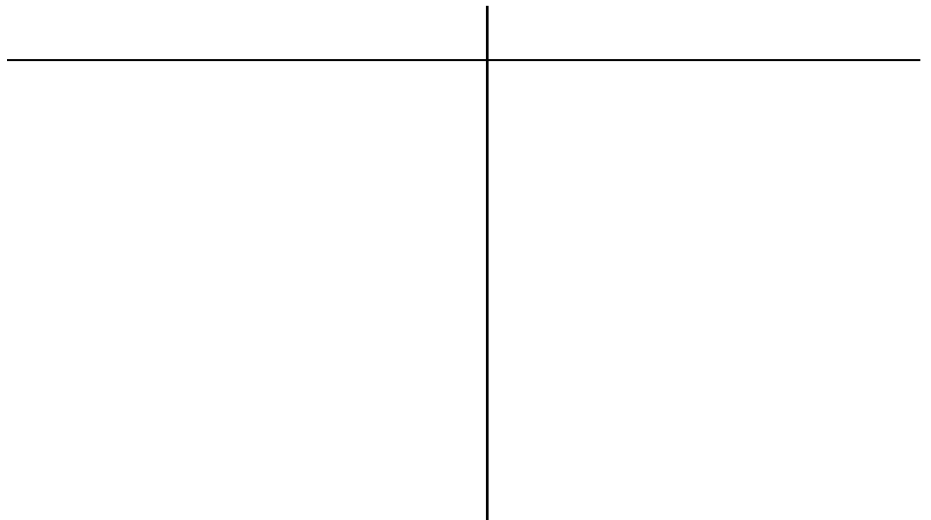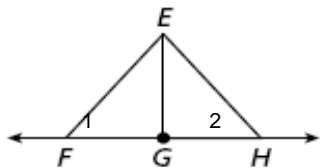
A' = _____

B' = _____

C' = _____

3. Proof

Given: G is the midpoint of $\overline{FH}$.
    $\overline{EF} \cong \overline{EH}$
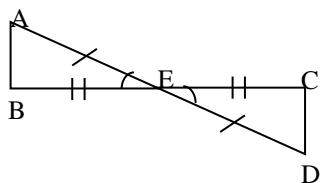
Prove: $\angle 1 \cong \angle 2$
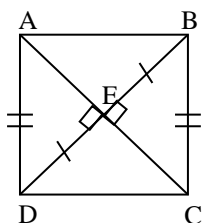
Chap 7 and 8 REVIEW   Study all of your Chapter 7 and 8 Notes, HW, and Review

#4-11. For each pair of triangles, tell which postulate, if any, can be used to prove the triangles congruent.
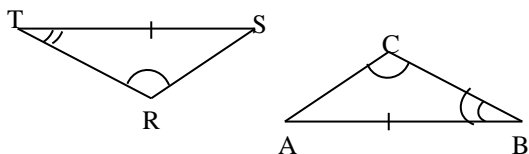
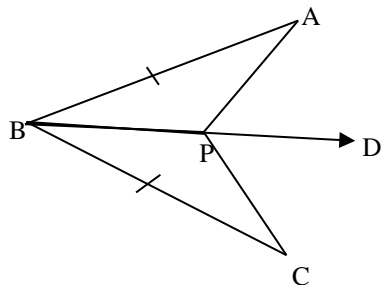4. $\triangle AEB \cong \triangle DEC$ _____
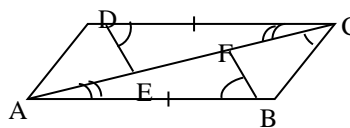
5. $\triangle CDE \cong \triangle ABF$ _____

6. $\triangle DEA \cong \triangle BEC$ _____

7. $\triangle AGE \cong \triangle CDF$_____

8. $\triangle RTS \cong \triangle CBA$ _____
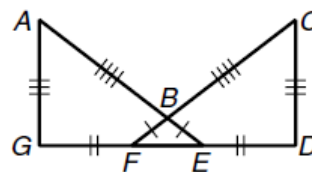
9. $\triangle ABC \cong \triangle ADC$ _____

10. $\triangle BAP \cong \triangle BCP$ _____
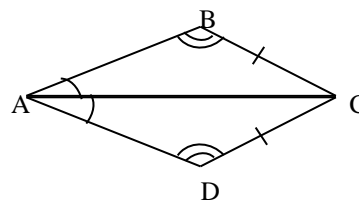Given: $\overrightarrow{BD}$ bisects $\angle ABC$

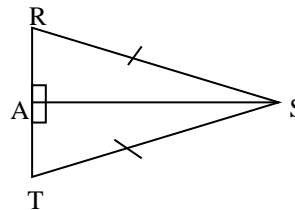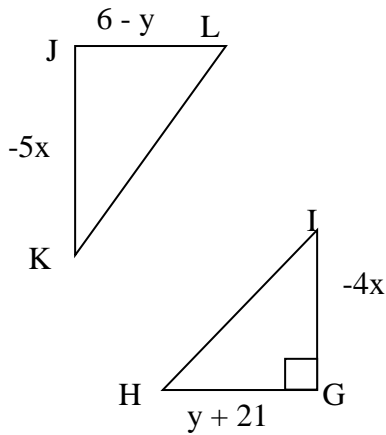11. $\triangle SAT \cong \triangle SAR$ _____

12. What is the length of $\overline{GH}$, if $\triangle GHI \cong \triangle JKL$?

6 - y   L
J

-5x

K

-4x

H
y + 21   G

13. If $\triangle$ CAT $\cong$ $\triangle$ DOG, CA = 4x − y, CT = 3y − 2, DO = 2x + 2 and
DG = x + 2y, find the value of x and y.

14. What conjecture can you make if X is the midpoint of $\overline{PQ}$ and $\overline{RX} \perp \overline{PQ}$?
(draw a picture first)

   A. $\triangle RXQ \cong \triangle RPQ$ by ASA congruence.
   B. $\triangle PRX \cong \triangle QRX$ by SAS congruence.
   C. $\triangle RXP \cong \triangle XQP$ by HL congruence.
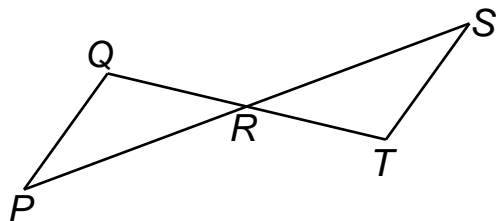   D. The triangles are not congruent.

15. Given: R is the midpoint of $\overline{PS}$

R is the midpoint of $\overline{QT}$

$\overline{PQ} \cong \overline{ST}$

Prove: $\angle P \cong \angle S$

16. Given: $\overline{AC} \perp \overline{DB}$; $\overline{EF} \perp \overline{DB}$

$\overline{AC} \cong \overline{EF}$; $\angle A \cong \angle E$

Prove: $\angle B \cong \angle D$